

### **Amendments to the Claims**

The listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims:**

1. (Currently Amended) An automated invoice management system for operation with a plurality of client systems including a plurality of vendor client systems and at least one payer client system, the automated invoice management system comprising:
  - a network circuit for communicating invoice management data with the plurality of client systems;
  - a session management engine coupled to the network circuit comprising:
    - ~~\_\_\_\_\_ means for establishing a secure session with at least a first vendor~~ each client system, and with at least one payer client system through the network circuit;
    - ~~\_\_\_\_\_ means for receiving a first vendor invoice transaction compliant with a first vendor client transaction definition from the a first vendor client system that includes identification of~~ and providing an export invoice transaction to a the payer client system;
    - ~~associated with the payer client system and amounts due from the payer client; and~~
    - ~~\_\_\_\_\_ a translation engine comprising:~~
    - ~~\_\_\_\_\_ means for translating the first vendor invoice transaction to a normalized invoice being compliant with a first vendor client transaction; definition and-~~
    - ~~\_\_\_\_\_ means for translating including vendor recognized business values, including a vendor recognized payer ID code and a vendor recognized vendor ID code, and an amount due from a customer associated with the normalized payer client system;~~
    - the export invoice transaction to an export invoice transaction being compliant with a payer client transaction definition and including payer recognized business

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values, including a payer recognized payer ID code and a payer recognized vendor ID code, and the amount due from the customer; and

a translation engine for:

performing data mapping translation to translate the first vendor invoice transaction from the vendor invoice transaction definition to a normalized invoice transaction definition and for performing business value translation to translate vendor recognized business values to normalized business values; and

performing data mapping translation to translate the normalized invoice transaction from the normalized invoice transaction definition to the payer client transaction definition and performing business value translation to translate normalized business values to payer recognized business values.

2. (Currently Amended) The automated invoice management system of claim 1, ~~further comprising a database and wherein the session management engine further comprises means for storing the normalized invoice transaction in the database wherein:~~

performing business value translation to translate vendor recognized business values to normalized business values comprises:

translating the vendor recognized vendor ID code to a global client code of the vendor by looking up the global client ID code of the vendor associated with the vendor recognized vendor ID code in a customer control table;

translating the vendor recognized payer ID code to a global client code of the payer by looking up the global client ID code of the payer associated with the vendor recognized payer ID code in a customer control table; and

performing business value translation to translate normalized business values to payer recognized business values comprises:

translating the global client code of the vendor to a payer recognized ID code of the vendor by looking up the payer ID code of the vendor associated with the

global client code of the vendor and the global client ID code of the payer in a vendor control table; and

translating the global client ID code of the payer to a payer recognized ID code of the payer by looking up the payer ID code of the payer associated with the global client code of the payer in the vendor control table.

3. (Currently Amended) The automated invoice management system of claim 2 1, ~~further including a data mapping dictionary that associates an element in the normalized transaction to at least a portion of an element in the vendor first client transaction definition and at least a portion of an element in the payer client transaction definition wherein:~~

performing business value translation to translate vendor recognized business values to normalized business values comprises:

translating the vendor recognized vendor ID code to a global client code of the vendor by mapping the vendor recognized vendor ID to the global client ID code which corresponds to the vendor recognized ID code in a look up table;

translating the vendor recognized payer ID code to a global client code of the payer by mapping vendor recognized payer ID code to the global client ID code of the payer which corresponds to the vendor recognized ID code in the look up table; and

performing business value translation to translate normalized business values to payer recognized business values comprises:

translating the global client code of the vendor to a payer recognized ID code of the vendor by mapping the global client code of the vendor to the payer ID code of the vendor that corresponds to both the global client ID code of the payer and the global client ID code of the vendor in the look up table; and

translating the global client ID code of the payer to a payer recognized ID code of the payer by mapping the global client code of the payer to the payer ID code of the payer that corresponds to the global client ID code of the payer in the look up table.

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Claims 4 – 6 (Canceled)

7. (Currently Amended) The automated invoice management system of claim 2, 1:  
wherein the session management engine further ~~comprises: means for receiving~~  
receives a payer remittance transaction compliant with a payer client remittance  
transaction definition from the payer client system, and providing a vendor remittance  
transaction to the vendor client system;

the payer remittance transaction being compliant with a payer remittance  
transaction definition and including payer recognized business values — that includes  
remittance data associated with the export invoice transaction including the payer  
recognized payer ID code and the payer recognized vendor ID code;

the vendor remittance transaction being complaint with a vendor remittance  
transaction definition and including vendor recognized business value associated with  
the export invoice transaction including the vendor recognized payer ID code and the  
vendor recognized vendor ID code; and

wherein the translation engine further:

performing data mapping translation to translate the payer remittance  
transaction from the payer remittance transaction definition to a normalized remittance  
transaction definition and for performing business value translation to translate the  
payer recognized business values to normalized business values;

performing data mapping translation to translate the normalized  
remittance transaction from the normalized remittance transaction definition to the  
vendor remittance transaction definition and for performing business value translation to  
translate the normalized business values to vendor recognize business values

~~means for translating the import remittance transaction to a normalized~~  
~~remittance transaction; and~~

~~means for translating the normalized remittance transaction to an export~~

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~~remittance transaction compliant with a first client remittance transaction definition.~~

8. (Currently Amended) The automated invoice management system of claim 2 1,  
wherein:

the session management engine further receives a second vendor invoice transaction from a second vendor client system, the second vendor invoice transaction being compliant with a second vendor client transaction definition and including vendor recognized business values, including a vendor recognized payer ID code and a vendor recognized vendor ID code, and amounts due from the payer client; and

wherein the translation engine further provides for:

performing data mapping translation to translate the second vendor invoice transaction from the vendor invoice transaction definition to a comprises:

~~means for translating a second vendor invoice transaction, that complies with a second vendor client transaction definition that is different than the first vendor client transaction definition and that identifies the payer client and amounts due from the payer client, to a second normalized invoice transaction compliant with the~~  
normalized invoice transaction definition and performing business value translation to translate vendor recognized business values to normalized business values; and

performing data mapping translation to translate ~~means for translating the second normalized invoice transaction from the normalized invoice transaction definition to the payer client transaction definition and performing business value translation to translate normalized business values to the payer recognized business values to a second export invoice transaction compliant with the payer transaction definition; and~~

~~wherein the session management engine further comprises:~~

~~means for receiving the second vendor invoice transaction from a second vendor client system; and~~

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~~means for storing the second normalized invoice transaction in the database;~~

~~means for providing both the export invoice transaction and the second export invoice transaction to the payer client in a single file through the network circuit.~~

9. (Currently Amended) A method of providing automated invoice management services to a plurality of client systems including a plurality of vendor client systems and at least one payer client system, the method comprising:

establishing a secure session with at least a first vendor client system and with at least one payer client system through a network circuit;

receiving a first vendor invoice transaction from the first vendor client system, the first vendor invoice transaction compliant with a first vendor client transaction definition and including vendor recognized business values, including a vendor recognized payer ID code and a vendor recognized vendor ID code, and an amount due from a customer associated with the payer client system ~~from a first vendor system that includes identification of a payer client associated with the payer client system and amounts due from the payer;~~

translating the first vendor invoice transaction to a normalized invoice transaction by performing data mapping translation to translate the first vendor invoice transaction from the vendor invoice transaction definition to a normalized invoice transaction definition and for performing business value translation to translate vendor recognized business values to normalized business values; and

translating the normalized invoice transaction to an export invoice transaction by performing data mapping transaction to translate the normalized invoice transaction from the normalized invoice transaction definition to the payer client transaction definition and performing business value translation to translate normalized business values to payer recognized business values ~~compliant with a payer client transaction~~

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~~definition that is different than the vendor client transaction definition; and~~  
providing the export invoice transaction to the payer client system.

10. (Currently Amended) The method of providing automated invoice management services of claim 9, wherein:

performing business value translation to translate vendor recognized business values to normalized business values comprises:

translating the vendor recognized vendor ID code to a global client code of the vendor by looking up the global client ID code of the vendor associated with the vendor recognized vendor ID code in a customer control table;

translating the vendor recognized payer ID code to a global client code of the payer by looking up the global client ID code of the payer associated with the vendor recognized payer ID code in a customer control table; and

performing business value translation to translate normalized business values to payer recognized business values comprises:

translating the global client code of the vendor to a payer recognized ID code of the vendor by looking up the payer ID code of the vendor associated with the global client code of the vendor and the global client ID code of the payer in a vendor control table; and

translating the global client ID code of the payer to a payer recognized ID code of the payer by looking up the payer ID code of the payer associated with the global client code of the payer in the vendor control table further comprising:

~~storing the normalized invoice transaction in a database.~~

11. (Currently Amended) The method of providing automated invoice management services of claim 10, wherein:

wherein:

performing business value translation to translate vendor recognized business

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values to normalized business values comprises:

translating the vendor recognized vendor ID code to a global client code of the vendor by mapping the vendor recognized vendor ID to the global client ID code which corresponds to the vendor recognized ID code in a look up table;

translating the vendor recognized payer ID code to a global client code of the payer by mapping vendor recognized payer ID code to the global client ID code of the payer which corresponds to the vendor recognized ID code in the look up table; and

performing business value translation to translate normalized business values to payer recognized business values comprises:

translating the global client code of the vendor to a payer recognized ID code of the vendor by mapping the global client code of the vendor to the payer ID code of the vendor that corresponds to both the global client ID code of the payer and the global client ID code of the vendor in the look up table; and

translating the global client ID code of the payer to a payer recognized ID code of the payer by mapping the global client code of the payer to the payer ID code of the payer that corresponds to the global client ID code of the payer in the look up table  
further comprising:

~~validating the normalized transaction by determining whether each of a plurality of elements in the normalized transaction complies with validation rules.~~

Claims 12 – 14 (Canceled)

15. The method of providing automated invoice management service of claim 10, further comprising:

receiving a second vendor invoice transaction from a second vendor client system, the second vendor invoice transaction being compliant that complies with a second vendor client transaction definition and including vendor recognized business values, including a vendor recognized payer ID code and a vendor recognized vendor



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ID code, that is different than the first vendor client transaction definition and that identifies the payer client and amounts due from the payer client;

performing data mapping translation to translate translating the second vendor invoice transaction from the vendor invoice transaction definition to a second normalized invoice transaction compliant with the normalized invoice transaction definition and performing business value translation to translate vendor recognized business values to normalized business values; and

storing the second normalized invoice transaction in the database;

performing data mapping translation to translate ;

translating the second normalized invoice transaction from the normalized invoice transaction definition to an export invoice transaction complying with the payer client transaction definition and performing business value translation to translate normalized business values to payer recognized business values; and to a second export invoice transaction compliant with the payer transaction definition;

providing both the export invoice transaction and the second export invoice transaction to the payer client in a single file through the network circuit

16. (New) An automated invoice management system for operation with a plurality of client systems including a plurality of vendor client systems and at least one payer client system, the automated invoice management system comprising:

a network circuit for communicating invoice management data with the plurality of client systems;

a translation database comprising at least one look up table associating normalized business values with each of vendor recognized business values and payer recognized business values;

a session management engine coupled to the network circuit and the translation database for establishing a secure session with each client system, receiving a first vendor invoice transaction from a first vendor client system and providing an export

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invoice transaction to a payer client system;

the first vendor invoice transaction being complicate with a first vendor client transaction definition and including vendor recognized business values, including a vendor recognized payer ID code and a vendor recognized vendor ID code, and an amount due from a customer associated with the payer client system;

the export invoice transaction being complaint with a payer client transaction definition and including payer recognized business values, including a payer recognized payer ID code and a payer recognized vendor ID code, and the amount due from the customer; and

a translation engine for:

performing data mapping translation to translate the first vendor invoice transaction from the vendor invoice transaction definition to a normalized invoice transaction definition and for performing business value translation to translate vendor recognized business values to normalized business values by looking up the normalized business value that corresponds to each vendor recognized business value in the look up table; and

performing data mapping translation to translate the normalized invoice transaction from the normalized invoice transaction definition to the payer client transaction definition and performing business value translation to translate normalized business values to payer recognized business values by looking up the payer recognized business value that corresponds to each normalized business value in the look up table.

17. (New) The automated invoice management system of claim 16, wherein:

performing business value translation to translate vendor recognized business values to normalized business values comprises:

translating the vendor recognized vendor ID code to a global client code of the vendor by mapping the vendor recognized vendor ID to the global client ID code

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which corresponds to the vendor recognized ID code in a look up table;

translating the vendor recognized payer ID code to a global client code of the payer by mapping vendor recognized payer ID code to the global client ID code of the payer which corresponds to the vendor recognized ID code in the look up table; and

performing business value translation to translate normalized business values to payer recognized business values comprises:

translating the global client code of the vendor to a payer recognized ID code of the vendor by mapping the global client code of the vendor to the payer ID code of the vendor that corresponds to both the global client ID code of the payer and the global client ID code of the vendor in the look up table; and

translating the global client ID code of the payer to a payer recognized ID code of the payer by mapping the global client code of the payer to the payer ID code of the payer that corresponds to the global client ID code of the payer in the look up table.

18. (New) The automated invoice management system of claim 16, wherein the at least one look up table comprises:

a vendor control table comprising a plurality of records, each record associating a payer recognized vendor ID code with a normalized vendor ID code of one of the plurality of vendor client systems and a normalized ID code of the payer client system; and

a customer control table comprising a plurality of records, each record associating a vendor recognized payer ID code with the normalized ID code of payer client system and a normalized ID code of one of the plurality of vendor client systems.

19. (New) The automated invoice management system of claim 18, wherein:

performing business value translation to translate vendor recognized business values to normalized business values comprises:

translating the vendor recognized vendor ID code to a global client code

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of the vendor by looking up the global client ID code of the vendor associated with the vendor recognized vendor ID code in a customer control table;

translating the vendor recognized payer ID code to a global client code of the payer by looking up the global client ID code of the payer associated with the vendor recognized payer ID code in a customer control table; and

performing business value translation to translate normalized business values to payer recognized business values comprises:

translating the global client code of the vendor to a payer recognized ID code of the vendor by looking up the payer ID code of the vendor associated with the global client code of the vendor and the global client ID code of the payer in a vendor control table; and

translating the global client ID code of the payer to a payer recognized ID code of the payer by looking up the payer ID code of the payer associated with the global client code of the payer in the vendor control table.